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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,340	12/16/2003	Thomas J. Dinger	LOT920030059US1	6138

23550 7590 08/27/2007  
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EXAMINER
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HOANG, HIEU T

ART UNIT	PAPER NUMBER
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2152

MAIL DATE	DELIVERY MODE
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08/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/737,340

**Applicant(s)**

DINGER ET AL.

**Examiner**

Hieu T. Hoang

**Art Unit**

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the communication filed on 12/16/2003.
2. Claims 1-25 are pending and presented for examination.

### ***Claim Objections***

3. Claims 1, 19 are objected to because of the following informalities:
4. Claim 1 recites the limitation "the learning management module" on line 4. There is insufficient antecedent basis for this limitation in the claim. For examining purpose, the limitation will be interpreted as "the learning management server."
5. Claim 19 recites the limitation "the creating step" on line 1. There is insufficient antecedent basis for this limitation in the claim. For examining purpose, the limitation will be interpreted as "the creating educational content."

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Alcorn et al. (US 2004/0153509, hereafter Alcorn)

8. For claim 1, Alcorn discloses a distributed learning management architecture, comprising:

- an authoring module for creating educational content (fig. 1C, [0145], [0150], content engine providing step-by-step instructions for an instructor for building a course);
- a learning management server for managing an on-line learning environment, wherein the learning management module receives the educational content created with the authoring module (fig. 1C, [0141], server 161 for managing educational content created with the content engines) and provides the educational content to a set of content servers (fig. 1C, fig. 2, set of content servers 130 can be used for load balancing educational content to clients); and
- a set of delivery servers for delivering a set of interface pages corresponding to the on-line learning environment to students (fig. 1C, fig. 2, a set of web server hosts 130 can be used to provide content to clients, fig. 24-37, content interface pages), wherein the set of content servers communicates the educational content to the students based on requests issued by the students using the set of interface pages ([0169], students request to receive course content and content is delivered), and wherein performance data generated by the students based on

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the educational content is returned to the set of delivery servers ([0173], student performance data such as quiz answers are returned to the web servers, [0185], students submitting files (uploading test papers) to be reviewed by instructor).

9. For claim 10, Alcorn discloses a component-based distributed learning management architecture, comprising:

- an authoring module for client-based creation of educational content (fig. 1C, [0145], [0150], content engine providing step-by-step instructions for an instructor for building a course);
- a learning management server for managing an on-line learning environment, wherein the learning management module receives the educational content created with the authoring module (fig. 1C, [0141], server 161 for managing educational content created with the content engines) and provides the educational content to a set of content servers (fig. 1C, fig. 2, set of content servers 130 can be used for load balancing educational content to clients);
- a plurality of delivery servers for delivering a set of interface pages corresponding to the on-line learning environment to students; a plurality of content servers for receiving the educational content from the learning management server, and for delivering the educational content to the students based on requests issued by the students using the set of interface pages (fig. 1C, fig. 2, [0045], a set of web server hosts 130 can be used to store educational content and provide or deliver

the educational content to clients upon requests, fig. 24-37, content interface pages); and

- a plurality of live session servers for delivering live learning sessions to the students based on the requests ([0205], [0206], initiating live classroom sessions), wherein performance data generated by the students based on the educational content and the live learning sessions is returned to the plurality of delivery servers (fig. 1C, [0173], student performance data such as quiz answers are returned to the web servers), and at predefined intervals, the performance data sent to the learning management server for analysis ([0173], student answers are returned to the educational management server to be graded, [0185], students submitting files (uploading test papers) to be reviewed by instructor).

10. For claim 16, Alcorn discloses computerized learning management method, comprising:

- creating educational content using an authoring module (fig. 1C, [0145], [0150], content engine providing step-by-step instructions for an instructor for building a course);
- communicating the educational content created with the authoring module to a learning management server that manages an on-line learning environment and communicating the educational content from the learning management server to a set of content servers (fig. 1C, [0141], server 161 for managing educational

content created with the content engines) and provides the educational content to a set of content servers (fig. 1C, fig. 2, set of content servers 130 can be used for load balancing educational content to clients);

- delivering a set of interface pages corresponding to the on-line learning environment to students from a set of delivery servers, where the set of interfaces pages displays possible selections of educational content that are available to the students (fig. 1C, fig. 2, a set of web server hosts 130 can be used to provide content to clients, fig. 24-37, content interface pages); and
- delivering the educational content to the students from the set of content servers based on requests made by the students using the set of interface pages ([0169], students request to receive course content and content is delivered).

11. For claim 2, Alcorn further discloses a set of live session servers for delivering live learning sessions to the students based on the requests issued by the students using the interface pages ([0205], [0206], initiating live classroom sessions).

12. For claim 3, Alcorn further discloses the set of content servers comprises a plurality of content servers, wherein the set of delivery servers comprises a plurality of delivery servers (same rationale as in claim 1), and wherein each of the plurality of content servers corresponds to one of the plurality of delivery servers (fig. 1C, fig. 2, content server and delivery server are one).

13. For claim 4, Alcorn further discloses the authoring module provides client-based creation of educational content ([0147], instructor can customize his teachings methods or lessons by interacting with certain modules).

14. For claims 5 and 11, Alcorn further discloses the students communicate with the architecture over a network using browsers, and wherein the set of interface pages are delivered to the browsers (fig. 5-37, browser interaction).

15. For claims 6 and 12, Alcorn further discloses the learning management server, the set of content servers, the authoring module and the set of delivery servers are implemented as separate elements within the architecture (fig. 1C, 2, management server 161, content and delivery servers 130, content engines).

16. For claims 7 and 13, Alcorn further discloses the set of interface pages displays possible selections of educational content that are available to the students, wherein the possible selections vary based on identities of the students (fig. 46, [0046], each student has a user name that is associated with certain system entitlements such as course(s) he can view).

17. For claims 8 and 14, Alcorn further discloses a content storage module for receiving the educational content from the authoring module, and for providing the



educational content to the learning management server (fig. 1C, [0045], established course content is stored in a server connected to the learning management server).

18. For claims 9 and 15, Alcorn further discloses a mail server for providing notifications to the students and instructors pertaining to the on-line learning environment ([0050], [0052], e-mail as a communication means between users of the system).

19. For claim 17, Alcorn further discloses communicating performance data generated by the students based on the educational content to the set of delivery servers ([0173], student performance data such as quiz answers are returned to the web servers), and at predefined intervals, from the set of delivery servers to the learning management server for analysis ([0173], student answers are returned to the educational management server to be graded).

20. For claim 18, Alcorn further discloses delivering live learning sessions to the students based on the requests issued by the students using the interface pages from a set of live session servers ([0205], [0206]).

21. For claim 19, Alcorn further discloses the creating step comprises interacting with the authoring module from a client (fig. 48-50, authoring with a browser).

22. For claim 20, Alcorn further discloses the set of interface pages are delivered to browsers operated by the students (fig. 5-37, student browsers for displaying pages).

23. For claim 21, Alcorn further discloses storing the educational content in a content storage module prior to communicating the educational content to the learning management server (fig. 1C, database and persistence 140, [0037], [0045], a server for storing content generated by authoring tool).

24. For claim 22, Alcorn further discloses transmitting notifications to the students and instructors from the learning management server ([0242], logs for system tuning, troubleshooting, tracking matters).

25. Claims 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Altenhofen et al. (US 7,153,137, hereafter Altenhofen).

26. For claim 23, Altenhofen discloses an off-line learning client architecture, comprising:

- a download and synchronization manager for downloading educational content from an on-line learning system (abstract, fig. 30, downloading an offline course), and for managing an off-line learning environment on a client (fig. 30, offline manager);

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- a local delivery server for delivering a set of interface pages corresponding to the off-line learning environment to a student (fig. 30 content management system delivers training content to offline manager); and
- a local content server for providing the educational content to the student based on requests issued by the student using the set of interface pages (fig. 7, content server A, fig. 29, content management system provides educational content based on a query for content), and wherein performance data generated by the student based on the educational content is provided to the download and synchronization manager for uploading to the on-line learning system (col. 23 lines 12-16, update learning progress as the user finishes a learning session).

27. For claim 24, Altenhofen further discloses the architecture is implemented on a client (fig. 31, a client uses his browser to learn offline).

28. For claim 25, Altenhofen further discloses a local application server for managing the local delivery server and the download and synchronization manager (fig. 7 application server WebAS).

***Conclusion***

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Rukavina et al. US 2002/0188583.
- Mui et al. US 2003/0229529.
- Das et al. US 2003/0105852.
- Liu et al. 2005/0120088.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HH/  
HH



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SUPERVISORY PATENT EXAMINER

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